

What is claimed is:

1 1. A driving circuit for driving a load according
2 to an AC current of an alternating current (AC) device,
3 comprising:

4 a current transformer having at least a primary
5 winding and a secondary winding, the primary
6 winding coupling to the AC device and the AC
7 device transmitting the AC current to the
8 primary winding, such that the secondary
9 winding generating an induced current; and

10 an induced impedance, connected with the secondary
11 winding in parallel, for generating an induced
12 voltage according to the induced current,
13 wherein the load is connected with the induced
14 impedance in parallel.

1 2. The driving circuit as claimed in claim 1,
2 wherein a coil number of the primary winding is smaller
3 than a coil number of the secondary winding.

1 3. The driving circuit as claimed in claim 1,
2 wherein the induced impedance is a resistor.

1 4. The driving circuit as claimed in claim 1
2 further comprising a low-pass filter connected with the
3 secondary winding in parallel.

1 5. The driving circuit as claimed in claim 1,
2 wherein the load is an illumination device.

1 6. The driving circuit as claimed in claim 5,
2 wherein the illumination device is an electroluminescent
3 lamp.

1 7. An electronic device having an illumination
2 circuit, comprising:

3 a first load, wherein a current flowing on the first
4 load is reduced as time increased;

5 an AC driving unit for generating an AC current to
6 drive the first load;

7 a current transformer having a primary winding and a
8 secondary winding, wherein the primary winding
9 is coupled between the first load and the AC
10 driving unit, such that the secondary winding
11 generates an induced current;

12 a second load having an illumination function,
13 wherein brightness of the second load is
14 changed according to an AC driving voltage and
15 wherein the brightness of the second load
16 corresponds to an operating duration of the
17 first load; and

18 a transformation device, connected with the
19 secondary winding and the second load in
20 parallel, for transforming the induced current
21 to the AC driving voltage to drive the second
22 load.

1 8. The electronic device as claimed in Claim 7,
2 wherein a coil number of the primary winding is smaller
3 than a coil number of the secondary winding.

1 9. The electronic device as claimed in claim 7,
2 wherein the transformation device comprises an impedance.

1 10. The electronic device as claimed in claim 9,
2 wherein the transformation device further comprises a
3 low-pass filter.

1 11. The electronic device as claimed in claim 7,
2 wherein the electronic device is a video projector.

1 12. The electronic device as claimed in claim 7,
2 wherein the first load is an AC lamp.

1 13. The electronic device as claimed in claim 7,
2 wherein the second load is an electroluminescent lamp.

1 14. An electronic device having an illumination
2 circuit, comprising:

3 a first load;

4 an AC driving unit for generating an AC current to
5 drive the first load;

6 a current transformer having a primary winding and a
7 secondary winding, wherein the primary winding
8 is connected with the first load in parallel
9 and coupled to the AC driving unit such that
10 the secondary winding generates an induced
11 current;

12 a second load having an illumination function; and

13 a transformation device coupled to the secondary
14 winding and second load for transforming the
15 induced current to the AC driving voltage to
16 drive the second load.

1 15. The electronic device as claimed in claim 14,
2 wherein a current flowing on the first load becomes
3 smaller and brightness of the second load is reduced over
4 time.

1 16. The electronic device as claimed in claim 14,
2 wherein the electronic device is a video projector.

1 17. The electronic device as claimed in claim 14,
2 wherein the first load is an AC lamp.

1 18. The electronic device as claimed in claim 14,
2 wherein the second load is an electroluminescent lamp.

1 19. The electronic device as claimed in claim 14,
2 wherein a coil number of the primary winding is smaller
3 than a coil number of the secondary winding.